

Work Order ID 163836

Monday, July 10, 2017 11:57:32 AM

163836

Page 1

Item ID: 646.4001

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 7/28/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
646.4000	C1

100

Document Control

100

DC

Doc.Control -USB or Paperwork

DOCUMENT CONTROL

Memo

0.00

Photocopy bluefile & type labels per PPP 646.4001

110

Pick Kit

110

Packaging

Packaging

Memo

0.00

0.00

120

QC4- 100% Inspect kits for completeness

120

QC

Quality Control

Memo

0.00

0.03

DAS
6
9-89

AUG 1 2017

DAS
28
9-89

AUG 2 8 2017

AUG 2 1 2017

DAS
6
9-89
DAS
27
9-89
DAS
26
9-89

AUG 2 2 2017

DAS
28
9-89

AUG 2 8 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 163836***163836***

Page 2

Monday, July 10, 2017 11:57:32 AM

Item ID: 646.4001

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 7/28/2017 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Identify as per dwg & Stock Location: Eg101

0.00

130

Packaging

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP 646.4001
Location: _____DAS
28
9-89

AUG 28 2017

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.10

Quality Control

DAS
21
9-89

AUG 29 2017

DAS
21
9-89

AUG 29 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
Root Cause				FAULT CATEGORY																					
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐															
OTHER : ☐																									

Picklist Print

Monday, July 10, 2017 11:57:27 AM

Page 1

Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM
IPP REV:B 15.01.08 AS PER DWG REV.B DD VERF:JLM IPP
REV:C 16.01.07 AS PER DWG REV.C DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
600.0129 *600 0129* VHB TAPE 75935A651		Purchased	No			100	f	232.0000	8	8			
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					CCK096			232					
					m135867			16					
					m137700			216					
600.0990 *600 0990* Magnabond 6398 Part A Size 112 ml		Purchased	No			100	Each	29.0000	1	1			
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					PKG			29					
					M136586			1					
					M136862			1					
					M137073			6					
					M137495			10					
					M137712			11					
600.0991 *600 0991* Magnabond 6398 Part B Size 112 ml		Purchased	No			100	Each	30.0000	1	1			
					<u>Location</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
					PKG			30					
					m136586			2					
					m136862			1					
					m137073			6					
					m137495			10					
					m137712			11					

19

DAS 27 9-89
DAS 26 9-89
AUG 1 8 2017

DAS 28 9-89

DAS 27 9-89

DAS 26 9-89

AUG 2 8 2017

exp 1 feb 2018
DAS 28 9-89

DAS 27 9-89

DAS 26 9-89

AUG 2 8 2017

exp 1 feb 2018
DAS 28 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Page 2

Monday, July 10, 2017 11:57:27 AM

Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

600.1012 Purchased No 100 Each 18.0000

600 1012

Sealant PR1425B2 (#654 sem)

** 1 1

AUG 1 8 2017

DAS 6 27
9-89 9-89

Location Loc Qty Loc Code

cck017 18
m137371 4
m137699 14

600.1013 Purchased No 100 Each 75.0000

600 1013

021200-3M TAPE PRIMER 94 PRIMER 24216

** 5 5

AUG 2 8 2017

DAS 26 27
9-89 9-89

Location Loc Qty Loc Code

CCK096 75
m137150 25
m137500 50

646.2910 Manufactured No 100 Each 9.0000

646 2910

Deflector

** 1 1

DAS 6 27
9-89 9-89

Location Loc Qty Loc Code

CCK050 9
155356 3
160183 6

646.3001 Manufactured No 100 Each 5.0000

646 3001

Lower Cable Cutter Assembly

** 1 1

AUG 1 8 2017

DAS 6 27
9-89 9-89

Location Loc Qty Loc Code

cck023 5
161804 2

7/21/2017 161803

Monday, July 10, 2017 11:57:27 AM

Shop Packet Print

Page 2

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date: _____		Step #: _____		QTY Effective: _____			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							

Picklist Print

Monday, July 10, 2017 11:57:27 AM

Page 3

Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

646.3110
646 3110

Channel

DAS
28
9-89

Manufactured No

100 Each

1.0000

1 1

**

AUG 2 1 2017

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck020

1

159544

1

5.0000

1 1

**

AUG 2 1 2017

DAS
6
9-89

DAS
27
9-89

646.3210
646 3210

Support

DAS
28
9-89

Manufactured No

100 Each

5.0000

1 1

**

AUG 2 1 2017

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck020

5

157802

5

8.0000

1 1

**

AUG 2 1 2017

DAS
6
9-89

DAS
27
9-89

646.3301
646 3301

Upper Cutter Assembly

DAS
28
9-89

Manufactured No

100 Each

8.0000

1 1

**

AUG 2 1 2017

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck018

8

159679

4

160062

4

4/10/2018

2/12/2019

1.0000

1 1

**

AUG 2 1 2017

DAS
6
9-89

DAS
27
9-89

646.3510
646 3510

Strut

DAS
28
9-89

Manufactured No

100 Each

1.0000

1 1

**

AUG 2 1 2017

DAS
6
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

cck104

1

156767

1

159848

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Monday, July 10, 2017 11:57:28 AM

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Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

646.3511
646 3511
Strut

Manufactured No

100 Each

7.0000

1 1

DAS 6

9-89

AUG 2 1 2017

DAS 27
9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

cck104

1

157789

1

CCK108A

6

161216

6

646.3610
646 3610
Filler

Manufactured No

100 Each

8.0000

1 1

DAS 26

9-89

AUG 2 8 2017

DAS 27
9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

cck104

8

156880

8

646.3710
646 3710
Doubler

Manufactured No

100 Each

12.0000

1 1

DAS 6

9-89

AUG 2 1 2017

DAS 27
9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

CCK006

12

152594

12

646.3711
646 3711
Clip

Manufactured No

100 Each

7.0000

1 1

DAS 26

9-89

AUG 2 8 2017

DAS 27
9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

cck104

7

156840

1

159504

6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
		OTHER : ☐							

Picklist Print

Monday, July 10, 2017 11:57:28 AM

Page 5

Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

646.3712

Manufactured No

100

Each

33.0000

1 1

646 3712

Clip

DAS
28
9-89

**

DAS
26
9-89
DAS
27
9-89

AUG 2 8 2017

Location

Loc Qty

Loc Code

cck104

33

156884

3

159863

30

646.3713

Manufactured No

100

Each

31.0000

1 1

646 3713

Gusset

DAS
28
9-89

**

AUG 2 1 2017

DAS
6
9-89
DAS
27
9-89

Location

Loc Qty

Loc Code

cck105

31

156776

3

159851

28

646.3714

Manufactured No

100

Each

31.0000

1 1

646 3714

Gusset

DAS
28
9-89

**

AUG 2 1 2017

DAS
6
9-89
DAS
27
9-89

Location

Loc Qty

Loc Code

cck105

31

156761

3

159846

28

646.3715

Manufactured No

100

Each

59.0000

2 2

646 3715

Strut Doubler

DAS
28
9-89

**

AUG 2 8 2017

DAS
26
9-89
DAS
27
9-89

Location

Loc Qty

Loc Code

cck105

59

159860

59

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
		OTHER :							

Picklist Print

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Page 6

Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

646.3716 Manufactured No

100 Each

2.0000

** 1

1

B/59850

DAS 26 9-89 DAS 27 9-89

646 3716

Gauge Bracket

DAS 28 9-89

Location

Loc Qty

Loc Code

cck105

2

156773

2

AUG 2 5 2017

646.3717 Manufactured No

100 Each

4.0000

** 1

1

B/61608

DAS 26 9-89 DAS 27 9-89

646 3717

Doubler

DAS 28 9-89

Location

Loc Qty

Loc Code

cck105

4

157774

4

AUG 2 5 2017

646.3718 Manufactured No

100 Each

18.0000

** 2

2

DAS 26 9-89 DAS 27 9-89

646 3718

Custom Washer

DAS 28 9-89

Location

Loc Qty

Loc Code

cck105

18

159350

18

AUG 2 5 2017

646.3719 Manufactured No

100 Each

21.0000

** 2

2x

DAS 26 9-89 DAS 27 9-89

646 3719

Doubler

DAS 28 9-89

Location

Loc Qty

Loc Code

cck105

21

159348

21

AUG 2 5 2017

646.3810 Manufactured No

100 Each

11.0000

** 2

2x

DAS 26 9-89 DAS 27 9-89

646 3810

Bracket

DAS 28 9-89

Location

Loc Qty

Loc Code

CCK106

11

160379

11

AUG 2 5 2017

1X B/62115

1x

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Shop Packet Print

Page 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Page 7

Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

646.3811

Manufactured No

100

Each

8.0000

1

1

646 3811

Radius Block

DAS
28
9-89

**

Location

Loc Qty

Loc Code

CCK106

8

160090

8

100

Each

24.0000

2

2

646.3812

Manufactured No

646 3812

Gusset Bracket

DAS
28
9-89

**

Location

Loc Qty

Loc Code

CCK106

9

159539

9

CCK108A

15

160378

15

100

Each

9.0000

1

1

646.3813

Manufactured No

646 3813

AS350 Strut Bracket

DAS
28
9-89

**

Location

Loc Qty

Loc Code

CCK106

9

157787

4

159545

5

100

Each

36.0000

4

4

646.3910

Manufactured No

646 3910

Shim

DAS
28
9-89

**

Location

Loc Qty

Loc Code

CCK106

36

159854

36

AUG 23 2017

AUG 23 2017

AUG 23 2017

AUG 23 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
		OTHER : ☐							

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Page 8

Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

646.3911
646 3911
Shim

Manufactured No

100

Each

23.0000

1 1

**

DAS 26 DAS 27
9-89 9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

CCK106

23

126229

2

159862

21

100

Each

57.0000

4 4

**

AUG 23 2017

646.3912
646 3912
Shim

Manufactured No

100

Each

57.0000

4 4

**

DAS 26 D 2
9-89 9

DAS 28
9-89

Location

Loc Qty

Loc Code

CCK106

57

159357

7

159793

20

161802

10

162501

20

100

Each

41.0000

1 1

**

AUG 23 2017

646.3913
646 3913
Shim

Manufactured No

100

Each

41.0000

1 1

**

DAS 26 D 2
9-89 9

DAS 28
9-89

Location

Loc Qty

Loc Code

CCK106

41

126060

41

100

Each

50.0000

1 1

**

AUG 23 2017

646.9410
646 9410
Shim

Manufactured No

100

Each

50.0000

1 1

**

DAS 26 DAS 27
9-89 9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

cck011

50

140671

50

AUG 23 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

647.0112
647 0112
Strut Bracket

DAS
28
9-89

Manufactured No

100 Each 66.0000 2 2

**

DAS
26
9-89

DAS
27
9-89

AUG 2 3 2017

Location	Loc Qty	Loc Code
CCK106	66	
159844	21	
161667	45	

647.7703
647 7703
Strut Assembly

DAS
28
9-89

Manufactured No

100 Each 15.0000 2 2

**

AUG 2 1 2017

DAS
6
9-89
DAS
27
9-89

Location	Loc Qty	Loc Code
CCK114	15	
159680	1	
160493	14	

650.9201
650 9201
Eyelet Bracket Assembly

DAS
28
9-89

Manufactured No

100 Each 18.0000 2 2

**

AUG 2 3 2017

DAS
27
9-89

Location	Loc Qty	Loc Code
cck127	18	
156828	8	
157798	10	

AN3-11A
AN3-11A
Bolt

DAS
28
9-89

Purchased No

100 Each 146.0000 10 10

**

m138230

DAS
26
9-89
DA
2
9-89

Location	Loc Qty	Loc Code
over003	100	
m136192	100	
ST349	46	
153855	46	

AUG 2 3 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date: _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Page 10

Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

AN3-12A
AN3-12A
Bolt

Purchased No

100 Each

174.0000

2 2

**

DAS
26
9-89
DAS
27
9-89

AUG 2 3 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

ST349

174

153854

174

2x

AN3-13A
AN3-13A
Bolt

Purchased No

100 Each

52.0000

1 1

**

DAS
26
9-89

AUG 2 3 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

11

m127070

11

ST349

41

m137886

41

1x

AN316C4R
AN316C4R
Nut, Jam

Purchased No

100 Each

47.0000

2 2

**

DAS
26
9-89

AUG 2 3 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

ST331

47

m137736

47

2x

AN3-3A
AN3-3A
Bolt

Purchased No

100 Each

105.0000

4 4

**

DAS
26
9-89
DAS
27
9-89

AUG 2 3 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

ST350

105

m137597

55

m137853

50

4x

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

AN3-4A Purchased No

100 Each 188.0000 10 10

AN3-4A

Bolt

**

DAS
26
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST350

188

m137478

188

10x

AUG 23 2017

AN3-5A Purchased No

100 Each 287.0000 2 2

AN3-5A

Bolt

**

DAS
26
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

FP001

6

m136986

6

ST350

281

m136986

131

m137963

150

2x

AUG 23 2017

AN3-6A Purchased No

100 Each 140.0000 2 2

AN3-6A

Bolt

**

DAS
26
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST350

140

m137412

140

2x

AUG 23 2017

AN44-5A Purchased No

100 Each 26.0000 2 2

AN44-5A

Eyebolt

**

DAS
26
9-89

DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST339

26

m137507

11

m137710

15

2x

AUG 23 2017

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date: _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
03 03								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Page 12

Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

AN4C7A
AN4C7A
BOLT

Purchased No

100 Each

79.0000

2 2

**

DAS 26
9-89 DAS 27
9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

ST345

79

m136295

4

m137361

75

AUG 23 2017

AN665-34R
AN665-34R
Clevis

Purchased No

100 Each

26.0000

2 2

**

DAS 26
9-89 DAS 27
9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

ST330

26

m137710

26

AUG 23 2017

CCR264SS3-02
CCR264SS3-02
Cherry Rivet

Purchased No

100 Each

381.0000

36 36

**

DAS 26
9-89 DAS 27
9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

ST321

381

M137710

381

AUG 23 2017

CR3213-5-3
CR3213-5-3
Cherry Rivet

Purchased No

100 Each

198.0000

14 14

**

DAS 26
9-89 DAS 27
9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

CCK003

100

m137736

100

ST319

98

m137320

58

m137391

40

AUG 23 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date: _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Monday, July 10, 2017 11:57:29 AM

Page 13

Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

MS20426AD5-7 Purchased No

100 Each

1,352.000

2 2

MS20426AD5-7

RIVET

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK004

703

153848

703

ST311

649

M133922

649

**

DAS
26
9-89
27
9-89
AUG 23 2017

MS20470AD5-5.5 Purchased No

100 Each

614.0000

8 8

MS20470AD5-5 5

Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

ST309

614

m134063

614

**

DAS
26
9-89
27
9-89
AUG 23 2017

MS20470AD5-6 Purchased No

100 Each

504.0000

8 8

MS20470AD5-6

RIVET

DAS
28
9-89

Location

Loc Qty

Loc Code

ST309

504

124089

504

**

DAS
26
9-89
27
9-89
AUG 23 2017

MS20470AD5-7 Purchased No

100 Each

335.0000

3 3

MS20470AD5-7

Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

ST309

335

123425

335

**

DAS
26
9-89
27
9-89
AUG 23 2017

MS21042-08 MS21042L08 Purchased No

100 Each

0.0000

2 2

MS21042-08

USE MS21042L08

DAS
28
9-89

Location

Loc Qty

Loc Code

**

DAS
26
9-89
27
9-89
AUG 23 2017

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Shop Packet Print

Page 13

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date: _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Page 14

Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

MS21042-3 MS21042L3 Purchased No

100 Each

0.0000

2

2

MS21042-3

Nut

**

m138084

DAS 26 DA 9-89 2

MS21042L3

Purchased No

100 Each

1,273.000

61

61

MS21042L3

Nut

**

m138084

DAS 26 DA 9-89 2

Location

Loc Qty

Loc Code

FP001

79

m135945

79

GA

394

m134360

102

M136665

292

ST303

800

m137680

300

m137886

500

MS21042L4

Purchased No

100 Each

1,666.000

2

2

MS21042L4

Nut

**

m137988

DAS 26 DA 9-89 2

Location

Loc Qty

Loc Code

FP001

10

m133363

10

GA

51

m135058

51

OVER007

1000

m137680

1000

ST303

605

m137402

400

m137544

205

AUG 23 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Page 15

Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

MS21047-3

Purchased

No

100

Each

183.0000

18

18

MS21047-3

Nut Plate

DAS
28
9-89

Location

Loc Qty

Loc Code

ST301

183

m137459

83

m137710

100

**

DAS
26
9-89

DAS
27
9-89

AUG 23 2017

MS24693-C278

Purchased

No

100

Each

100.0000

5

5

MS24693-C278

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST287

100

m137680

100

**

DAS
26
9-89

DAS
27
9-89

AUG 23 2017

MS24694-S51

Purchased

No

100

Each

220.0000

5

5

MS24694-S51

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST284

220

m136866

220

**

DAS
26
9-89

DAS
27
9-89

AUG 23 2017

MS24694-S54

Purchased

No

100

Each

132.0000

2

MS24694-S54

SCREW

DAS
28
9-89

Location

Loc Qty

Loc Code

ST284

132

153846

32

m137951

100

**

DAS
26
9-89

DAS
27
9-89

AUG 23 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date: _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
OS								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : _____									

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

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Work Order ID: 163836

Parent Item: 646.4001

Parent Item Name: AS350 Cable Cutter System

163836

646 4001

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-16

Purchased

No

100

Each

147.0000

24 24

MS27039-1-16

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

over006

50

m137061

50

ST280

97

m137320

19

m137736

78

18x m138045. AUG 2 2 2017

DAS
26
9-89
DAS
27
9-89

MS27039-1-19

Purchased

No

100

Each

283.0000

22 22

MS27039-1-19

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

80

m134134

80

ST280

203

m137361

203

AUG 2 2 2017

MS27039-1-20

Purchased

No

100

Each

57.0000

2 2

MS27039-1-20

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST280

57

m136554

57

22x.

AUG 2 2 2017

MS27039-1-21

Purchased

No

100

Each

115.0000

4 4

MS27039-1-21

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST280

115

m127904

115

2x.

AUG 2 2 2017

DAS
26
9-89
DAS
27
9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0332P

Purchased

No

100

Each

2,152.000

144

144

NAS1149F0332P

Washer

**

DAS 26 DAS 27
9-89 9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

AUG 2 2 2017

GA

275

m133709

275

ST262

1877

m137710

1877

144

NAS1149F0363P

Purchased

No

100

Each

226.0000

2

2

NAS1149F0363P

WASHER

**

DAS 26 DAS 27
9-89 9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

AUG 2 2 2017

ST262

226

124555

26

m137544

200

2x

NAS1149F0432P

Purchased

No

100

Each

1,039.000

4

4

NAS1149F0432P

WASHER

**

DAS 26 DAS 27
9-89 9-89

DAS 28
9-89

Location

Loc Qty

Loc Code

AUG 2 2 2017

ST260a

1000

M137412

1000

ST262

39

M137361

39

4x

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date: _____		Step #: _____		QTY Effective: _____			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER: _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Page 19

Monday, July 10, 2017 11:57:30 AM

Work Order ID: 163836

163836

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017

Required Date: 7/28/2017

Start Qty: 1.00

Required Qty: 1.00

NAS1149FN832P

Purchased

No

100

Each

2,526.000

4

4

NAS1149FN832P

Washer

**

DAS
26
9-89

DAS
28
9-89

AUG 2 2 2017

Location

Loc Qty

Loc Code

GA

358

M135058

208

M136182

40

M136866

110

ST260a

1500

M137820

1500

ST263

668

M137412

668

YX.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date: _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 163836

Monday, July 10, 2017 11:57:32 AM

163836

Page 1

Item ID: 646.4001

Revision ID:

Item Name: AS350 Cable Cutter System

Start Date: 7/21/2017 Start Qty: 1.00

Required Date: 7/28/2017 Req'd Qty: 1.00

Reference:

Accept

N900040100Setup Start ***NS1***Stop ***NS2***

Cust Item ID:

Customer:

Approvals:

Process Plan: W

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

646.4000

C1

100

Document Control

AUG 01 2017***100***

DC

DOCUMENT CONTROL

Doc.Control -USB or Paperwork

Memo

0.00

Photocopy bluefile & type labels per PPP 646.4001

DAS
5
9-89**AUG 08 2017**

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.03

Quality Control

United States Of America
Department of Transportation - Federal Aviation Administration
Supplemental Type Certificate

Number SR02180LA

This Certificate issued to Apical Industries, Inc. dba Dart Aerospace
3030 Enterprise Court, Suite A
Vista, CA 92081

certifies that the change in the type design for the following product with the limitations and conditions therefore as specified hereon meets the airworthiness requirements of Part 27 of the Federal Aviation Regulations.*

**Certification basis is set forth in Type Certificate Data Sheet H9EU.*

Original Product Type Certificate Number: H9EU

Make: Eurocopter France

Model: AS350 C, D, D1, B, B1, B2, BA, B3

Description of Type Design Change: Installation of a Cable Cutter Kit in accordance with FAA approved Apical Master Document List, MD350-61, Revision A, dated November 25, 2008, or later FAA approved revision.

Limitations and Conditions: The installation should not be incorporated in any aircraft unless it is determined that the interrelationship between this installation and any previously approved configuration will not introduce any adverse effect upon the airworthiness of the aircraft. The approval of this modification applies to the above noted aircraft model series only. This approval requires the inspections and overhaul schedules to be performed as mandated by Apical Industries, Inc.'s Instructions for Continued Airworthiness, ICA350-61, Revision N/C, dated November 20, 2008, or later FAA accepted revision. A copy of this STC must be included in the permanent records of the modified aircraft. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: May 21, 2008

Date issued: August 7, 2014

Date of issuance: December 16, 2008

Date amended:

By direction of the Administrator



Haifa Haj-Eid
(Signature)

Haifa Haj-Eid
Supervisor, Technical and Administrative
Support Staff
Los Angeles Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE EXPLICIT WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.

NOTES:

1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.

2 INSTALL F/N 14 WITH F/N 52 & 53.

3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASER-CARR P/N 75935A651.

4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R.S. HUGHES P/N 021200-24216.

5 REUSE FASTENERS FROM F/N 1.

6 USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT.

7 AT CUSTOMERS OPTION INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.

8 INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78 SCREW IN PLACE OF F/N 17 SCREW.

9 NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

REFERENCE ONLY

UNINCORPORATED ECN(S)

05304

5	5	5	78	601.3875	SCREW					
1	1	1	77	646.9410	SHIM					
	4	4	76	601.2764	WASHER	NAS1149F043P				
	2	2	75	601.2973	LOCKNUT	MS27042-08				
	2	2	74	601.2988	SCREW	MS27039-0B13				
	2	2	73	601.2943	LOCKNUT	MS27042-3				
	2	2	72	601.3128	NUT	AN316C48				
	2	2	71	601.3209	LOCKNUT	MS27042-4				
	4	4	70	601.2638	WASHER	NAS1149F043P				
	2	2	69	601.2669	BOLT	AN4C7A				
	2	2	68	601.3119	CLEVIS	AN46AS-348				
	2	2	67	601.3121	EYE BOLT	AN46A-5A				
	2	2	66	650.9201	EYE BRACKET ASSY					
REF	REF	REF	65	647.5701	GPS MOUNT KIT					
		2	64	601.3151	WASHER	NAS1149F043P				
			63	601.2911	SCREW	MS24694503				
	24	24	62	601.2637	SCREW	MS27039-1-16				
2	2	2	61	601.2763	BOLT	AN3-12A				
	1	1	60	646.3913	SHIM					
	4	4	59	646.3912	SHIM					
	1	1	58	646.3911	SHIM					
	4	4	57	646.3910	SHIM					
	5	5	56	600.1013	PRIMER					
	8 FT	8 FT	55	600.0129	VHB TAPE					
	1	1	54	600.1012	SEALANT	PP 1405 CLASS B				
		1	53	600.0991	MAGNIBOND 6998 PART B					
		1	52	600.0990	MAGNIBOND 6998 PART A					
	6	10	51	601.2826	BOLT	AN3-11A				
		2	50	646.3814	WIPER BRACKET					
		2	49	601.2910	SCREW	MS27039-1-16				
	2	2	48	601.1365	SCREW	MS27039-1-30				
	2	2	47	646.3719	DOUBLER					
		2	46	646.3718	CUSTOM WASHER					
	1	1	45	646.3717	DOUBLER					
	22	22	44	601.1948	SCREW	MS27039-1-19				
		2	43	601.1952	SCREW	MS27039-1-20				
	4	4	42	601.1956	SCREW	MS27039-1-21				
4006	4005	4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	MATL	SPEC.

LY

MISCELL			
REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECN 02199, 02201, 02219 & 02745	03/08/2010	P. BRAYO
B	INCORPORATED ECN 02844, 02879 & 04701	11/04/2014	P. BRAYO
C	INCORPORATED ECN 03028	09/09/2015	P. BRAYO

		2	2	41	601.2829	SCREW	MS24694564			
		2	2	40	601.2831	RIVET	MS20426A05-7			
		1	1	39	646.3716	GAUGE BRACKET				
		6	6	38	601.1953	SCREW	MS27029-1-12			
	2	2	2	37	646.3715	STRUT DOUBLER				
	2	2	2	36	601.2824	BOLT	AN3-5A			
12	36		36	35	601.2277	RIVET	CC09445-309			
6	18		18	34	600.0795	NUTPLATE	MS27047-3			
3	3		3	33	601.2565	RIVET	MS20470A05-7			
1	1		1	32	646.3813	STRUT BRACKET				
4	4		4	31	601.2822	BOLT	AN3-3A			
2	2		2	30	646.3812	GUSSET BRACKET				
8	8		8	29	601.2564	RIVET	MS20470A05-6			
1	1		1	28	646.3714	GUSSET				
	1	1	1	27	646.3610	FILLER				
	3	3	3	26	601.2830	SCREW	MS24694559			
	2	2	2	25	601.2825	BOLT	AN3-6A			
	1	1	1	24	646.3811	RADIUS BLOCK				
	1	1	1	23	646.3712	CLIP				
	1	1	1	22	646.3711	CLIP				
8	8		8	21	601.2832	RIVET	MS20470A05-5			
14	14		14	20	601.2020	RIVET	CR3013-5-3			
4	6	4	6	19	601.2823	BOLT	AN3-4A			
	1	1	1	18	601.2827	BOLT	AN3-13A			
	5	5	5	17	601.2912	SCREW	MS24694551			
1	1		1	16	646.3713	GUSSET				
1	1		1	15	646.3210	SUPPORT				
	1	1	1	14	646.3710	DOUBLER				
	1	1	1	13	646.3110	CHANNEL				
14	10	8	53	6	61	12	601.1624	LOCKNUT	MS21042L3	
16	32	18	120	16	144	11	601.1607	WASHER	MS21042L3	
			1	10	646.3410	LH WIPER DEFLECTOR				
			1	9	646.3411	RH WIPER DEFLECTOR				
		2	2	8	647.7703	STRUT ASSY				
		2	2	7	647.0112	STRUT BRACKET				
	1	1	1	6	646.3511	STRUT				
	1	1	1	5	646.3510	STRUT				
2	2		2	4	646.3810	BRACKET				
		1	1	3	646.2910	DEFLECTOR				
	1	1	1	2	646.3001	LOWER CUTTER ASSY				
		1	1	1	646.3301	UPPER CUTTER ASSY				
X					646.4006	LOWER CUTTER TIRED PROVISIONS				
	X				646.4005	LOWER CUTTER REMOVABLE PROVISIONS				
	X				646.4004	FIXED PROVISIONS KIT				
		X			646.4003	CABLE CUTTERS AS WE-HOR RATED PROVISIONS				
			X		646.4002	AS350 WIPER DEFLECTOR KIT				
			X		646.4001	AS350 CABLE CUTTERS KIT				
4006	4005	4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	MATL	SPEC.

QTY

NEXT ASSY (S)

ORIGINATOR: 08-27-08
DRAWN BY: P. BRAYO
CHECKED BY: P. BRAYO
APPROVED BY: P. BRAYO
DATE: 08/27/08

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
2 PLACE DECIMALS 1 1/16
3 PLACE DECIMALS 1/32
4 PLACE DECIMALS 1/64

3030 ENTERPRISE CT.
SUITE A
VISTA, CA 92081
(760)-724-5300

APICAL INDUSTRIES INC.
DBA DART AEROSPACE

AS350 CABLE CUTTERS KIT

SHEET 1 OF 8